to completion time, repetitions and errors. Statistical analysis done using T-test and Mann Whitney test.
Results: Fifty completed the FLS tasks. There is no significant difference in the completion time between 2D and 3D participants with median of 247 and 216 minutes correspondingly. The median number of repetitions and errors were lower in the 3D vs. 2D; 108 vs.121 (P value < 0.05) and 27 vs.105 (P value < 0.05) respectively.
Conclusion: 3D laparoscopy showed significant reduction in repetitions needed to perform laparoscopic tasks and lower errors as compared to the standard 2D laparoscopy. However; time spent to reach proficiency in performing FLS tasks was not significantly different between the 2D and 3D groups.

ASIT SURGICAL EDUCATION PRIZE: 0720: DO NON-SURGICAL DEXTERITY SKILLS AFFECT THE LAPAROSCOPIC ABILITY OF NOVICE SURGEONS?
Duncan Scrimgeour[1], David Neilly[1], Tim McAdam[1], Steven Yule[2]. [1] *Aberdeen Royal Infirmary, NHS Grampian, UK;* [2] *Harvard Medical School, Boston, USA.*
Aims: We investigated if non-surgical dexterity skills affect the novice surgeon's ability to perform a laparoscopic task.
Methods: Medical students completed a questionnaire to ascertain their surgical skills experience, year of study and experience with video games and musical instruments. After a five-minute practice session each student performed a laparoscopic stacking task using a laparoscopic simulator within three minutes to achieve a score out of twenty. Statistical analysis using analysis of variances (ANOVA) with post hoc tests and two-tailed unpaired t-tests were performed when appropriate.
Results: Forty-six medical students were enrolled in the study. The majority of students were in years 4 and 5 (n=33) and 80% of students had attended surgical skills courses in the past. Approximately half played video games (n=22) and 45% of students played one or more musical instrument(s). Attending surgical skills courses significantly improved mean score (13.65 vs. 10.11,$p<0.05$) but playing musical instruments (13.81 vs. 12.24, $p=0.22$) or video games (13.14 vs. 12.79,$p=0.79$) had no significant impact.
Conclusions: Previous training improves laparoscopic performance but experience with video games or musical instruments has no effect.

ASIT SURGICAL EDUCATION PRIZE: 0961: COGNITIVE TASK ANALYSIS IN SUPERFICIAL PAROTIDECTOMY: A USEFUL ADJUNCT FOR LEARNING
David Pennell, Rodney Mountain. *Ninewells Hospital, Dundee, UK.*
Aim: Non-technical (cognitive) skills complement the cutting prowess of a successful surgeon. Skills such as such as team working, leadership, situational awareness, decision making and communication are seldom taught in surgery, yet are root causes of a large proportion of surgical error and subsequent litigation. The purpose of this study was to determine if cognitive task analysis (CTA) could capture steps and decision points that were not articulated during traditional teaching of a superficial parotidectomy.
Method: An expert surgeon was videotaped performing superficial parotidectomies, and procedural steps were transcribed real-time. Following the surgery, the expert surgeon was interviewed and a cognitive task analysis (CTA) was performed. A 42-step procedural checklist and an 18-step cognitive demands table was created using information gleaned from CTA. The steps outlined by CTA were then compared to traditional teaching of a successful parotidectomy (textbook and instructive combined).
Results: Traditional teaching methods described 43% of procedural ("how-to") steps as outlined by CTA, and 28% of cognitive steps.
Conclusion: With application of CTA intraoperatively, we identified numerous procedural steps and decision points that were omitted during traditional teaching. It is anticipated that application of CTA in surgery will infer trainees with improved problem solving abilities reducing operative error.

ASIT SURGICAL EDUCATION PRIZE: 1061: MEASURING SURGICAL TECHNICAL APTITUDES THAT CORRELATE WITH OPEN, LAPAROSCOPIC, ENDOSCOPIC AND VIRTUAL REALITY SIMULATOR PERFORMANCE
Hyunmi Park[1], Eamonn Ferguson[2], Patrick Clarke[2], James Youngs[2], Charles Maxwell-Armstrong[1]. [1] *Queens Medical Centre, Nottingham University Hospitals NHS Trust, Nottingham, UK;* [2] *Nottingham University, Nottingham, UK.*
Aims: Identify aptitudes necessary in surgery by correlating open, laparoscopic, endoscopic and virtual reality simulator performance to the Flying Aptitude Test (FAT), a test that selects candidates with innate psychomotor abilities in flying but also in surgery.
Methods: 1: Computer based FAT (aptitudes: Visual, Psychomotor, Attentional, Spatial aptitudes & Work Rate). 2: Open, laparoscopic, endoscopic, virtual reality simulator and Psychometric tests.
Results: Total n=243. 52.3% female. Mean age 24. Medical students 86.6%. FAT n= 230, Lap sim n=177. Total lap sim time Mean 716 sec. Open Basic Surgical Skills (BSS) Tests n=26, mean 79.85%. Endo sim n=19, mean 899sec. FAT index & Lap sim tests participants n=169. Pearson Correlation -0.314 ($p=0.001$). Spearman Correlation: FAT index & BSS n=24; 0.563 ($p=0.004$), FAT Psychomotor Aptitude & BSS; 0.836 ($p<0.001$). FAT index & time to full advancement of Endoscopic simulation n=14; -0.738 ($p=0.003$).
Conclusions: Statistically significant correlation between validated FAT score and all three modalities of surgery; open, laparoscopic and endoscopic. Such test can be used as an adjunct to the current selection system, to select those who possess the technical abilities to succeed in surgical training and on completion to be able to lead a safe independent practice as a consultant surgeon.

ASIT SURGICAL EDUCATION PRIZE: 1319: ASIT/ETHICON SURGICAL EDUCATION PRIZE WINNER: BETTER TRAINING BETTER CARE: CORE SURGICAL TRAINEE LED OPERATING LISTS
Moez Zeiton, Aqsa Siddiqi, David J. Jones. *University Hospitals of South Manchester, Manchester, UK.*
Aim: To assess the effect of providing Core Surgical Trainee (CST) led operating lists in the Better Training Better Care (BTBC) pilot on operation times and hospital stay.
Method: Operations coded as elective open inguinal hernias between August 2010 and January 2013 (5 CST cohorts) were analysed. Outcomes for inguinal hernia operations performed by CSTs on BTBC lists were compared to non-BTBC dedicated operations.
Results: 291 operations performed in period observed. Mean length of operation was 68 minutes (median 65 mins). Mean length of stay in hospital was 0.93 days (median 1 day). BTBC operations, n=11. Mean operation time 79 mins (median 86 mins). Mean length of hospital stay 0.82 days (median 1 day).
Conclusion: BTBC is a pilot scheme (supporting 16 NHS pilot sites) that aims to improve the quality of training and learning for professionals, for the benefit of patient care. At UHSM, CST led lists have been introduced under the supervision of consultants to address the quality of core surgical training. Our study has shown that BTBC operations take slightly longer, reflecting the training component of the operation. Hospital stay is shorter in BTBC potentially reflecting better continuity of care. Further studies with greater numbers are warranted.

ASIT ORAL POSTER: 0120: AN EVALUATION OF STEREOACUITY IN PRACTISING SURGEONS ACROSS A RANGE OF SURGICAL SPECIALITIES
Mairiosa Biddle, Sana Hamid, Nadeem Ali. [1] *Saint Georges University of London, London, UK;* [2] *Moorfields Eye Hospital London, London, UK.*
Background/Aims: Judging depth is important in surgery. Although there are several cues that permit depth perception, stereoacuity has been singled out as a possible predictor of surgical ability. However, it is not clear whether high-grade stereoacuity is necessary for a career in surgery. We therefore aimed to evaluate stereoacuities in practising surgeons across different surgical specialties, using three standard stereotests.
Methods: We recorded stereoacuity values on surgeons at a London teaching hospital using the Titmus, TNO and Frisby stereotests.
Results: The 66 surgeons tested came from 12 surgical specialties. There were 36 Trainees and 30 Consultants. Median stereoacuities (with range) for the whole group were: 40 sec arc on Titmus (40-800), 30 sec arc on TNO (15-480) and 20 sec arc on Frisby (20-600). Four surgeons had no recordable stereoacuity on TNO, and one was also unrecordable on Titmus. Three of these four were Consultants. Depending on the test used, high grade stereopsis was found in 74%-83% of surgeons and reduced stereopsis in 2%-14% of surgeons.
Conclusion: Most surgeons have high-grade stereoacuity but around 20% do not, and a few have no recordable stereoacuity. It is therefore not necessary to have high-grade stereoacuity for a career in surgery.